

AMENDMENT

In the Claims:

Please cancel claims 24, 25 and 26. A complete listing of the claims proper claim with identifier is set forth below.

1. (Previously presented) A navigation system comprising:
 - speech-recognition means for performing speech-recognition processing on input speech spoken by a speaker;
 - language-determining means for determining a language in which said input speech is spoken based on the contents of said input speech as recognized by said speech-recognition means;
 - navigation-processing means for performing a vehicle-installed-type navigation operation utilizing the language-as determined by said language-determining means; and
 - image recognition means for determining the contents of the characters included in an inputted image of a road sign-
 - wherein said navigation-processing means includes a guiding means for replacing the characters, whose contents are determined by said image recognition means, with other characters having substantially the same meaning in the language determined by said language-determining means, and for displaying characters or outputting speech.
2. (Original) The navigation system according to Claim 1, wherein:
 - said navigation-processing means includes map displaying means for displaying map information showing a vicinity of a vehicle; and
 - said map displaying means utilizes the language of a speaker, as determined by said language-determining means, for the language of characters included in said displayed map information.
3. (Original) The navigation system according to Claim 1, wherein:

said navigation-processing means includes route-searching means for searching for a route to a destination and route-guiding means for guiding a vehicle by means of guiding speech along a route set by said route-searching means; and

said route-guiding means generates said guiding speech utilizing the language of a speaker as corresponding to said language determined by said language-determining means.

4. (Previously presented) The navigation system according to Claim 1, wherein said language-determining means identifies a language of every word in said input speech and determines if a-majority of words are spoken in one language.

5. (Original) The navigation system according to Claim 4, wherein:
said language-determining means includes a database for storing features of a speaker's language as extracted by the language-determining means; and
the speaker's language is determined individually.

6. (Canceled)

7. (Original) The navigation system according to Claim 1, further comprising:
transmission requesting means for requesting transmission of detailed information in the language of a speaker as determined by said language-determining means; and

information receiving means for receiving the transmitted detailed information transmitted in accordance with the request from said transmission requesting means.

8. (Previously presented) A navigation system comprising:
a microphone;
a speech-recognition device operable to determine a language of a spoken word, connected with the microphone;
an identity learning unit operable to compute a frequency of languages determined by said speech-recognition device and update contents of an identity

database based on a frequency distribution of the languages stored in said identity database;

- a disc reading device operable to read map data from a storage medium;

- a map reading control unit operable to specify a speaker's language based on the determination result of said identity learning unit, and send said disc-reading device a request for map data corresponding to the specified language of a speaker;

- a camera;

- an image recognition unit operable to determine a language of a character string included in a road sign captured by said camera;

- a navigation processing unit operable to replace the character string captured by the image recognition unit with characters in the speaker's language that have the same meaning; and

- a display device operable to display a map image showing a vicinity of a vehicle.

9. (Previously presented) A navigation system comprising:

- a microphone;

- a speech-recognition device operable to determine a language of a spoken word, connected with the microphone;

- an identity learning unit operable to compute a frequency of languages determined by said speech-recognition device and update contents of an identity database based on a frequency distribution of the languages stored in said identity database;

- an intersection guiding unit operable to specify a speaker's language based on the determination result of said identity learning unit, generate an intersection guiding image corresponding to the specified language, and cause a speech data generating unit to generate guiding speech data corresponding to the specified language;

- an audio unit operable to output the guiding speech data generated by said speech data generating unit;

- a camera;

an image recognition unit operable to determine a language of a character string included in a road sign captured by said camera;

a navigation processing unit operable to translate the character string captured by the image recognition unit into the speaker's language; and

a display device operable to display the intersection guiding image generated by said intersection guiding unit.

10. (Previously presented) A navigation system comprising:

a microphone;

a speech-recognition device operable to determine a language of a spoken word, connected with the microphone;

an identity learning unit operable to compute a frequency of languages determined by said speech-recognition device and update contents of an identity database based on a frequency distribution of the languages stored in said identity database;

a camera;

an image recognition unit operable to determine a language of a character string included in a road sign captured by said camera;

a guiding sign generating unit, operable to generate a guiding image in a speaker's language, connected with said image recognition device; and

a display device for displaying said guiding image generated by said guiding sign generating unit

wherein the guiding unit replaces the character string captured by the image recognition unit with characters in a user's language that have the same meaning.

11. (Original) The navigation system according to Claim 10, further comprising:

a speech data generating unit connected with said guiding sign generating unit; and

an audio unit for outputting guiding speech data generated by said speech data generating unit,

12. (Previously presented) The navigation system according to Claim 10, wherein said guiding sign generating unit generates a guiding image by replacing character strings in a road sign with character strings of a different language.

13. (Previously presented) A navigation system according to Claim 10, wherein said guiding sign generating unit generates the guiding image without replacing the language of the character strings contained in said road sign.

14. (Previously presented) A navigation system comprising:
a microphone;
a speech-recognition device operable to determine a language of a spoken word, connected with the microphone;
an identity learning unit operable to compute a frequency of languages determined by said speech-recognition device and update contents of an identity database based on a frequency distribution of the languages stored in said identity database;
a disc-reading device operable to read map data from a storage medium;
a map reading control unit operable to specify a speaker's language based on the determination result of the identity learning unit, determine whether map data corresponding to the specified language is not stored in the storage medium, and send said disc reading device a request for reading map data independent of the specified language;
a map buffer operable to store the read map data;
a camera;
an image recognition unit operable to determine a language of a character string included in a road sign captured by said camera; and
a navigation processing unit operable to replace the character string captured by the image recognition unit with characters in the speaker's language that have the same meaning.

15. (Previously presented) The navigation system according to Claim 14, further comprising an information processing unit for sending to an information center a

request for transmitting the map data dependent on the language of a speaker, for receiving the map data, and for storing the map data in the map buffer.

16. (Previously presented) A map information displaying method in a navigation system comprising the acts of:

- performing speech-recognition processing on input speech;
- determining a language of a speaker of the input speech based on contents of the recognized input speech;
- inputting an image of a road sign;
- determining contents of the characters in the image; and
- translating the contents of the character in the image into the language of the speaker; and
- displaying map information.

17. (Original) The map information displaying method in a navigation system according to Claim 16, further comprising the act of determining whether map information corresponding to a speaker's determined language is stored in a storage medium.

18. (Original) The map information displaying method in a navigation system according to Claim 17, further comprising the act of reading map information independent of a speaker's language when the speaker's determined language is not stored in the storage medium.

19. (Original) A map information displaying method in a navigation system according to Claim 18,

- wherein a request for transmitting map information dependent on a speaker's language is sent to an information center; and
- the map information corresponding to this transmission request is received and stored in a map buffer.

20. (Previously presented) A route guiding method in a navigation system comprising the acts of:

searching for a route to a destination;
performing speech-recognition processing on input speech;
determining a language of a speaker of the input speech based on the contents of the recognized input speech;
generating guiding speech corresponding to the speaker's determined language;
guiding a vehicle along a route set in the searching step using the guiding speech;
inputting an image of a road sign;
determining the contents of the characters in the image; and
translating the contents of the characters in the image into the language of the speaker.

21. (Previously presented) A road guiding method in a navigation system comprising the acts of:
performing speech-recognition processing on input speech;
determining a language of a speaker of the input speech based on the contents of the recognized input speech;
inputting an image of a road sign;
determining the contents of characters contained in said image; and
replacing the characters contained in the image, whose contents have been determined, with other characters in a speaker's determined language having the same meaning.

22. (Original) The route guiding method in a navigation system according to Claim 21 further comprising the act of displaying the characters in the speaker's determined language.

23. (Original) The route guiding method in a navigation system according to Claim 21 further comprising the act of audibly outputting the characters in the speaker's determined language.

24. (Canceled)

25. (Canceled)

26. (Canceled)